

ABSTRACT

An object is to provide a method for fabricating a multi-wavelength semiconductor laser device that can be well mass produced. A first intermediate body is fabricated on a semiconductor substrate SUB1. The first intermediate body includes a first lasing portion 1a of a multi-layer stack, and a metal adherent layer. A second intermediate body is fabricated on a support substrate. The second intermediate body includes a second lasing portion 2a formed of a multi-layer stack to be less in size than the first lasing portion 1a, and a groove formed adjacent thereto to form a metal adherent layer. Then, with waveguide paths 1b and 2b brought into close proximity to each other, the adherent layers of the first and second intermediate bodies are fused to generate an integrated adherent layer CNT, thereby securely adhering the first and second lasing portions 1a and 2a to each other. Thereafter, the support substrate is stripped off from the second lasing portion 2a, thereby allowing the adherent layer CNT to be partially exposed. A semiconductor laser device LD is thus fabricated which has the exposed adherent layer CNT as a common electrode.